

CLAIMS:

1. A liquid organometallic compound vaporizing and feeding system comprising

5 (1) a liquid reagent container containing a liquid organometallic compound, a vaporizer for vaporizing the liquid organometallic compound, a liquid reagent passageway connecting said container to said vaporizer and having a liquid mass flow controller disposed therein for controlling
10 the flow rate of the liquid organometallic compound,

(2) a carrier gas source, a carrier gas passageway connecting said carrier gas source to said vaporizer and having a gas mass flow controller disposed therein for controlling the flow rate of the carrier gas,

15 (3) a sample gas passageway including one end connected to a gas outlet of said vaporizer and another end connected to a sample inlet of an ICP emission spectrometer, and having an in-line monitor disposed therein,

(4) a gas cylinder filled with a standard gas for
20 calibration, and a standard gas passageway connecting said gas cylinder to said sample gas passageway at a position downstream of said in-line monitor and having a gas mass flow controller disposed therein for controlling the flow rate of the standard gas.

25

2. The vaporizing and feeding system of claim 1, comprising a plurality of calibration standard gas cylinders, and a corresponding plurality of standard gas passageways each having a gas mass flow controller disposed therein for
30 controlling the flow rate of the corresponding standard gas.